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W. A. KELLERMAN, Ph. D. OHIO STATE UNIVERSITY

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Mycological Bulletin

Nos. 69-70

W. A. Kellerman, Ph. D., Ohio State University
Columbus, November, 1906.

A WORD ABOUT SENDING SPECIMENS.

The season unusually favorable for Mushrooms has induced many to send specimens to be photographed, to be identified, etc., but alas, the precious boxes are not appreciated by the mail carriers, and the plants are in sorry plight too often on their arrival. We can not always blame the postmen, perhaps, for the general destruction; no doubt, in some cases at least, it is the fault of imperfect packing. The box may be strong enough to withstand the weight of superincumbent mail, but if the specimens rattle about in the space assigned them, surely the delicate or fleshy ones will suffer. Then, perhaps, a suggestion will be in order:

Very soft paper should be used in the packing—tissue-paper or paper napkins. Wrap the stem carefully, to keep the dirt from soiling everything that it may touch. Then continue folding the soft paper around the stem until the diameter is equal to the cap, finally enclosing the latter. Treat each specimen in this manner which you are intending to lay in the box; the same applies to clusters also. Have the box lined with cotton and after the specimens have been laid in their place, add still more cotton to fill quite snugly or compactly all the otherwise vacant space between the specimens. End the packing by laying a liberal supply of the same material on the top of the plants and tie down the lid. Of course, the appropriate Nos. on tags or slips of paper should have been placed with the specimens in each case. If you have fine material it ought to be worth this much attention.

We are again under obligations to Superintendent Hard, of Chillicothe, for a nice picture and some notes on an interesting Mycena. We have also levied tribute on Professor Atkinson again; what he says can be relied on—and then I can not quote too often from his valuable book on Mushrooms.

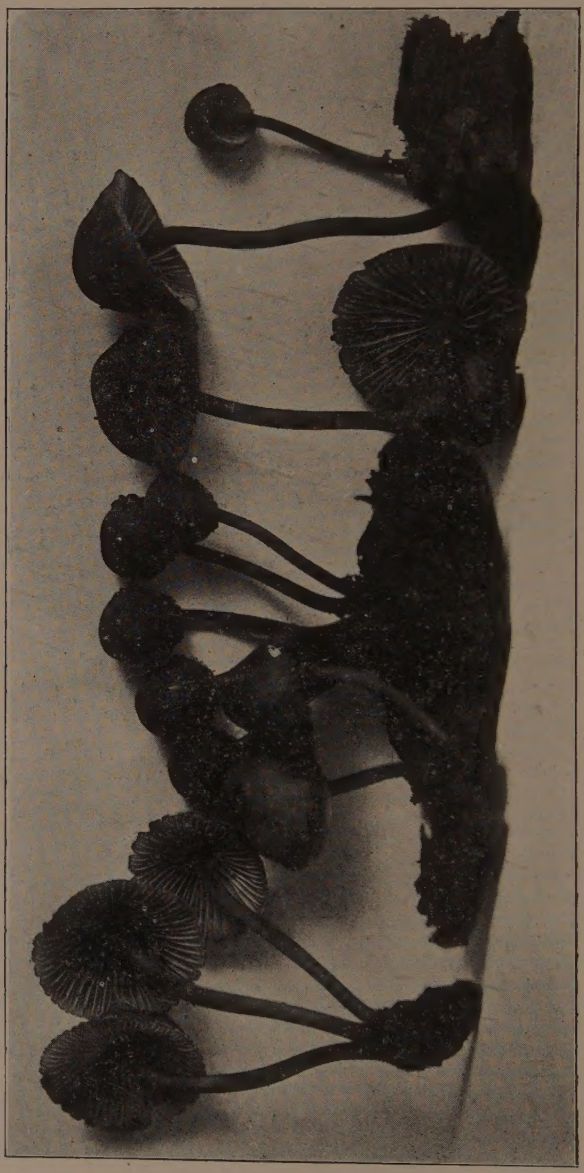

Fig. 213. MY-CE'-NA HAE-MAT'-O-PA. See text for explanation.

MYCENA HAEMATOPA, PERS.

M. E. Hard.

This is one of the prettiest specimens found in the woods at this season of the year. It is quite common about Chillicothe. The stems and caps are alike tender and will amply pay to pick them. They grow on well decayed logs and stumps. They grow in tufts or groups. No one will experience any difficulty in recognizing it from the cut. Its dense cespitose habit, the red juice which exudes from the stem, and the denticulate margin of the cap will assist the student in recognizing it. It is called "haematopa" or bloody-footed Mycena because a deep blood red juice exudes from the stem. This also more or less pervades the cap. The cap is fleshy, one inch broad, conic or bell-shaped, somewhat umbonate, obtuse, whitish to flesh color, with more or less dull red, even or slightly striate at the margin, the margin extending beyond the gills and is denticulate or toothed.

The gills are attached to the stem, often with a decuurrent tooth, whitish and tinged with a dull red.

The stem is two to four inches long, firm, hollow, sometimes smooth, sometimes powdered with a whitish soft hairy down, the color the same as the pileus, yielding a dark red juice which gives the name to the species.

The color varies quite a little in these plants. This is due to some plants having more of the red juice than others. It is found on decayed stumps and logs in damp places from August to October.

FUNGI IN THE ARTS.

Geo. F. Atkinson, Cornell University.

A rumber of different species of mushrooms have been employed in the manufacture of useful articles. Their use for such purposes, however, was more common in the past than at present, and it is largely, therefore, a matter of historic interest at the present time, though some are still employed for purposes of this kind.

TINDER MUSHROOM OR AMADOU.—The Polyporus fomentarius, or "tinder mushroom," or, as it is sometimes called, "German tinder," was once employed in the manufacture of tinder. The outer hard coat was removed and the central portion, consisting almost entirely of the tube system of several years' growth, was cut into strips and beaten to a soft condition. In this form it was used as tinder for striking fire.

The inner portion was also used in making caps, chest-protectors, and similar articles. A process now in vogue in some parts of Germany, is to steam the fruit bodies, remove the outer crust, and then, by machinery constructed for the purpose, shave the fruit body into a long, thin strip by revolving it against a knife in much the same way that certain woods are shaved into thin strips for the manufacture of baskets, plates, etc. Some articles of clothing made from this fungus material are worn by peasants in certain parts of Europe.

MUSHROOMS FOR RAZOR STROPS.—The beech polyporus (*P. betulinus*), several centuries ago was used for razor strops. The fruit body after being dried was cut into strips, glued upon a stretcher, and smoothed down with pumice stone (Asa Gray Bull. 7:18, 1900.) The sheets of the weeping Merulius (See Fig. 189), were also employed for the same purpose, as were also the sheets of "punk" formed from mycelium filling in cracks in old logs or between boards in lumber piles. Sometimes

extensive sheets of this punk are found several feet long and a foot or more wide. These sheets of pure mycelium resemble soft chamois skin or soiled kid leather.

MUSHROOMS EMPLOYED FOR FLOWER POTS.—In Bohemia (according to Cooke, Fungi, etc., p. 103) hoof-shaped fruit bodies of *Polyporus fomentarius* and *igniarius* are used for flower pots. The inner, or tube portion, is cut out. The hoof-shaped portion, then inverted and fastened to the side of a building or place of support, serves as a receptacle for soil in which plants are grown.

CURIOS.—The *Polyporus applanatus* is much sought by some persons as a "curio," and also for the purpose of etching. In the latter case they serve as pastels for a variety of art purposes. The under surface of the plant is white. All collectors of this plant know that to preserve the white fruiting surface in a perfect condition it must be handled very carefully. A touch or bruise or a scratch results in a rapid change in color of the injured surface. Beautiful etchings can thus be made with a fine pointed instrument, the lines of color appearing as the instrument is drawn over the surface.—Mushrooms, Edible, Poisonous, etc.

Fig. 214. PO-LY'-PO-RUS SUB-SE-RI'-CE-US. An interesting little Polypore, dark brown and silky in appearance, growing in open woods and protected places, not occurring in abundance. The specimens from which the photograph was made were sent from Chillicothe by Supt. M. E. Hard.

NOTES FROM MUSHROOM LITERATURE. V.

W. A. Kellerman.

ANOTHER FLY AGARIC.—Under this title D. R. Sumstine gives in the Journal of Mycology for November, 1905, the following note:

Amanita muscaria is called the fly agaric because infusions of it are poisonous to flies. It has now, however, a keen rival for this reputation in another species of the same genus. Last summer while drying specimens of *Amanita olitaria* Bull, a number of flies were attracted to them. After the flies had remained on the plants for a short time they fell over apparently dead. This continued until thirty-nine fly mycophagists had become the victims of some narcotic contained in the mushrooms. The box with flies and plants was then set aside for future study. After two hours the box was again examined, but the flies which once were dead were now alive and had departed with no more serious results possibly than a severe headache from their mycological "booze."

Several experiments were made with other specimens of the same species and the same results were obtained. It seems that this plant has some property that acts as an intoxicant or soporific to flies. It is reported by some writers as edible and by others as poisonous.

SOMETHING INTERESTING ABOUT THE MORELLE.—The following was published in the Journal of Mycology, November, 1905, by W. C. Sturgis, under the title *Remarkable Occurrence of Morchelia Esculenta (L.)Pers*:

During a recent hunting trip in southwestern British Columbia the writer came across this fungus growing in such abundance and in a location and at a season of the year so unusual that the circumstances seem worth recording. Usually one expects to find *Morchella* in the Spring growing on the borders of meadows or other grassy places. In the present instance the plants were found in September on a steep mountain side which had, within a little over a year, been subjected to a destructive forest fire.

On September 11th the writer was skirting the precipitous side of a mountain at an altitude of about 7,000 feet, and while passing through what had been a fairly good growth of aspens and small spruces, a few fine specimens of *Morchella* were noticed. Further search revealed the presence of these plants literally in hundreds. A fire had passed across the mountain in June, 1904, leaving only skeletons of the trees standing and charring the ground to such a depth that no trace of green vegetation had since appeared. Yet under these unfavorable circumstances and at a season when snow had already fallen not far from the locality, a bushel of *Morchellas* might have been gathered within a radius of one hundred yards. The specimens were exceptionally fine, in some cases attaining a height of seven inches and a circumference around the pileus of ten inches. In such specimens the pileus usually showed a great variety of form, from conical and flattened to nearly spherical. In other cases the pileus more nearly resembled that of *M. conica* Pers. The base of the stipe was in all cases much swollen and consisted of a mass of mycelium and soil cemented into a sclerotoid mass. Specimens were secured from which the identity of the fungus was later determined.

The interesting question arises whether, on the western slopes of the Rocky mountains, *Morchella* usually occurs in the autumn rather than in the spring, as elsewhre, and also how the presence of the particular specimens is to be accounted for. It is hardly possible that the spores could have been carried to the locality in sufficient quantity to have produced in one season so large a growth of plants, and it is almost equally inconceivable that a subterranean mycelium could have resisted a degree of heat sufficient to destroy permanently all surface vegetation and leave the ground a desolate waste of charred clay.

POLYPORUS OBTUSUS.—We have learned to expect a goodly number of mycological articles in each new Annual Report of the Missouri Botanical

Garden. One such in the 16th report (1905) deals with one of the shelf-fungi, or Polypores, namely Polyporus obtusus, author Perley Spaulding. This species seems to occur only in North America and is confined to a few of the oaks, the "black oak family" exclusively, gaining entrance to the living plants through wounds. The disease so caused Mr. Spaulding found in central Missouri and northern Arkansas, on *Quercus marilandica* (Black Jack)) and *Quercus velutina* (Black Oak). However, the Polypore is a saprophyte—"There is not the slightest hint of its occurring as a wound parasite. It not only grows on the trees but it sooner or later causes the death of the affected trees. The rot extends up and down in the heart wood until the tree is so weakened that it breaks over or dies outright. From what could be gathered by observations it seemed that the fungus works remarkably fast in causing the death of the attacked trees." Three full-page half tones admirably illustrate the species in question.

MARASMIUS DELECTANS.—Prof. Morgan has recently described this elegant new species, the same being illustrated by Fig. 200 in the BULLETIN. His description of the plant is as follows: MARASMIUS DELECTANS MORGAN SP. NOV.—Pileus subcoriceous, convex then expanded and depressed glabrous, rugulose, white changing in drying to pale and alutaceous. Stipe long, slender, tapering slightly upward, glabrous, brown and shining, white at the apex, arising from an abundant white-floccose mycelium. Lamellae moderately broad, unequal, rather distant, trabeculate between, white emarginate adnexed; spores lance-oblong, hyaline, 7-9 x 4 mic.

Growing on old leaves in deciduous woods. Pileus 1-2 cm. in diameter, the stipe 3-5 cm. long and 1.0-1.5 mm. thick.

THE FOLLOWING IS TAKEN FROM THE LAST NUMBER OF THE JOURNAL OF MYCOLOGY:

A NEW SPECIES OF GALERA: CHARLES H. PECK.—A species of this genus apparently undescribed has been brought to my notice recently of which the following account may be given:

GALERA KELLERMANI PECK sp. nov.—Pileus very thin, subovate or subconic, soon becoming plane or nearly so, striatulate nearly to the center when moist, more or less wavy and persistently striate on the margin when dry, minutely granulose or mealy when young, unpolished when mature, often with a few scattered floccose squamules when young, and sometimes with a few slight fragments of a veil adhering to the margin which appears as if finely notched by the projecting ends of the gills, watery brown when moist grayish brown when dry, a little darker in the center, taste slight, odor faint, like that of decaying wood; lamellae thin, close, adnate, a delicate cinnamon brown becoming darker with age; stem slender, equal or slightly tapering upward, finely striate, minutely scurfy or mealy at least when young, hollow, white; spores brownish ferruginous with a faint pinkish tint in mass, elliptic, 8-12x6-7 μ.

Pileus 2-3 cm. broad; stem 2.5-4 cm. long, 1-2 mm. thick. Gregarious or subcespitose. Ground in a greenhouse, Columbus, Ohio, August, 1906. Number 4494. Dr. W. A. Kellerman.

The distinguishing characters of this species are its broadly expanded or plane grayish brown pileus with its minutely granulose or mealy surface, its persistently striate margin and its very narrow gills becoming brownish with age. The indication of a veil is also unusual.

The species is respectfully dedicated to its discoverer who has kindly sent copious notes, specimens, spore-prints and photograph from which the description has been prepared.

EXPLANATION OF PLATE 89.—Galera kellermani Peck. A half tone illustration of several plants. A very young specimen shows the minutely granulose or mealy character of the cap. Fully grown plants are shown and in one case the fragments of a veil are distinctly seen attached to the margin.

Fig. 215. GA-LE'-RA KEL-LER-MAN'-I. See text on opposite page.

Fig. 216. I-NOC'-Y-BE SUB-O-CHRA'-CE-A. BURT'-I-I. A small but conspicuous Mushroom sent to us by Supt. Hard, of Chillicothe, Ohio. Neither Atkinson nor McIlvaine describe any of our species, the latter remarking that "none reported as edible or poisonous; those I have tasted are not pleasant." The genus Inocybe is well described by Atkinson. It consists of ochre-spored species of various character, the gills being adnate, sinuate, rarely decurrent, and in one species free. It is placed next to the genus Hebeloma.

The Mycological Bulletin is issued Monthly, Price 25c. Copies of Vol. II (1904) and Vol III (1905) may be had for 50 cents each, or cloth bound copies for 75 cents, No. copies remain of Vol. I (1902). Address W. A. Kellerman, Columbus, Ohio

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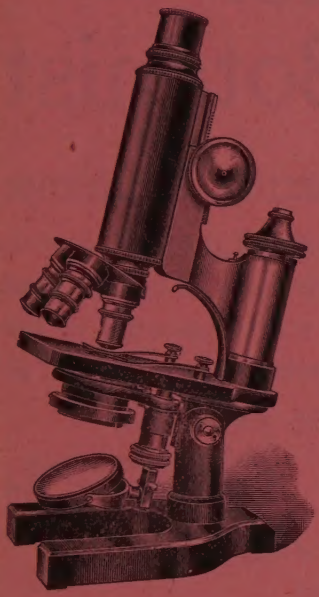

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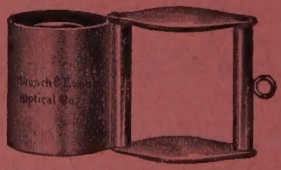

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